West Virginia Ordnance Works

Size: 2,704 acres
Mission: Manufactured TNT

HRS Score: 35.72; placed on NPL in September 1983

IAG Status: First IAG signed in September 1987; second IAG signed in July 1989

Contaminants: TNT, DNT, and organic compounds

Media Affected: Groundwater, surface water, sediment, and soil

Funding to Date: \$48.7 million

Estimated Cost to Completion (Completion Year): \$41.0 million (FY2031) Final Remedy in Place or Response Complete Date for All Sites: FY2004



Point Pleasant, West Virginia

Restoration Background

From 1941 to 1946, West Virginia Ordnance Works manufactured TNT from toluene, nitric acid, and sulfuric acid. By-products of the manufacturing process included TNT, DNT, and organic compounds, which were released into groundwater, soil, surface water, and sediment. Principal site types include TNT manufacturing areas, wastewater sewer lines, and wastewater ponds known as the "Red and Yellow Water Ponds."

Preliminary Assessments and Site Inspections (SIs) in FY81 and FY82 identified two operable units (OUs). The property is now divided into 12 OUs. From FY88 to FY93, contaminated soil was capped in the TNT manufacturing area. Caps for the ponds and the reservoir (OUs 2 and 3) were completed, and the installation began Remedial Investigation and Feasibility Study (RI/FS) activities at OUs 8, 9, and 11. The U.S. Army Corps of Engineers (USACE) began operations and maintenance and long-term monitoring (LTM) for OUs 1, 2, and 3.

In FY94, the site management plan for the former installation was completed. Remedial Design (RD) activities were completed for OU4 and the groundwater extraction and treatment system. RI activities continued for the other OUs, and Expanded SIs began. USACE removed 546 tons of hazardous material from the TNT manufacturing area and backfilled open pits and manholes.

In FY95, USACE completed Removal Actions for asbestos in the acids area and two powerhouses and performed follow-on building demolition. USACE also began quarterly LTM of the adjacent Point Pleasant and Camp Conley municipal water supply wells. Construction began on a groundwater extraction and treatment system at OU4 and OU5. At OU6, sampling was completed, and the RD began for construction of wetlands. Potentially responsible party (PRP) efforts

began for OU7. A risk assessment began at OU11.

During FY96, USACE submitted a risk assessment and an RI report to EPA Region 3 and began an FS at OUs 8, 9, and 11. It also initiated final Baseline Risk Assessments for OUs 10 and 12.

In FY97, USACE completed construction of the groundwater extraction and treatment system and submitted a Remedial Action report for OU4. The final Alternative Analysis report for OU5 and the final Baseline Risk Assessment for OUs 10, 11, and 12 also were submitted to EPA. USACE presented a draft FS for OU10, a draft risk evaluation for ESI 3, and a Proposed Plan for OU11. The conceptual design for OU5 also was initiated.

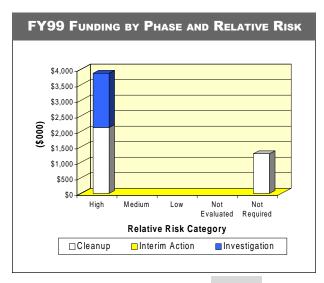
USACE worked with the technical review committee (TRC) to reestablish project priorities. Additionally, a draft no-action Record of Decision (ROD) was reached for OU11 through partnering with regulatory agencies.

FY98 Restoration Progress

Based on partnering with regulatory agencies, DoD, and USACE, an agreement was reached with the property owner to purchase the OU11 property under CERCLA authority. USACE completed a sitewide groundwater model and converted the TRC to a formal Restoration Advisory Board (RAB). USACE increased RAB support and public awareness through community surveys and media involvement. A draft FS for OU4 Alternative Analysis was completed to identify alternatives for bringing the system into compliance with state discharge standards. Completion of the OU5 ROD was delayed, pending the outcome of fish sampling analyses and associated issues. USACE developed draft decision documents for Extended SIs 1, 2, 3, 8, and 9. Draft Proposed Plans for OU10 and OU12 were completed.

Plan of Action

- Complete OU5 ROD (no action pending resolution of fish sampling issues) in FY99
- Complete OU1 burning ground investigation in FY99
- Develop final decision documents for Extended SIs 1, 2, 3, 8, and 9 in FY99
- Complete final Proposed Plan and ROD for OU10 and OU12 in FY99
- · Complete final FS for OU4 Alternative Analysis in FY99



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